



SEMICONDUCTOR Small Signal Products

MATERIAL CONTENT LIST

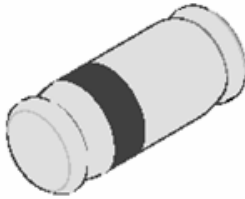
SOD-80 MiniMELF- TLZ...
SOD-80 - with "--IR" suffix**

PACKAGE
FAMILY:
DATE:
REVISION:

18/07/2012
2

**HALOGEN
FREE**

**RoHS
COMPLIANT**



MATERIAL CONTENT					
Part	Material	CAS N°	weight mg	% of weight	ppm of total weight
Leads 56.9%	Fe	7439-89-6	7.7	44.0%	250224
	Cu	7440-50-8	4.2	24.0%	136486
	Ni	7440-02-0	5.6	32.0%	181981
	CuO	1317-38-0	Trace		
	TOTAL		17.5		
Terminal finish 1.6%	Sn	7440-31-5	0.468	97.5%	15208
	Ag	7440-22-4	0.012	2.5%	390
	TOTAL		0.48		
Package Glass 41.3%	PbO *)	1317-36-8	7.78	61.3%	252907
	SiO ₂	14808-60-7	4.05	31.9%	131571
	K ₂ O	12136-45-7	0.44	3.5%	14445
	Na ₂ O	1313-59-3	0.00	0.02%	83
	Al ₂ O ₃	1344-28-1	0.02	0.12%	495
	B ₂ O ₃	1303-86-2	0.38	3.0%	12381
	Sb ³⁺ ***)		0.03	0.2%	825
	TOTAL		12.7		
Silicon Chip 0.3%	Si	7440-21-3	0.0741	80.19%	2408
	Ag	7440-22-4	0.0153	16.56%	497
	SiO ₂	14808-60-7	0.0015	1.62%	49
	PbO *)	1317-36-8	0.0013	1.41%	42
	Ni	7440-02-0	0.0002	0.22%	6
	TOTAL		0.09		
Ink 0.04%	Carbon black	1333-86-4	0.0037	34.1%	121
	Formaldehyde	50-00-0	0.0001	1.0%	4
	Phenol	108-95-2	0.0006	5.1%	18
	Tributyl phosphate	126-73-8	0.0065	59.8%	212
	Cl	7782-50-5	N. D.**)		
	Br	7726-95-6	N. D.**)		
	TOTAL		0.01		
Total weight			31		

Remarks: Total weight range ± 10%

*) Pb in glass of electronic components acc. RoHS exempted; Lead Monoxide just raw ingredient for glass production, but not present as such in glass anymore

**) Not detected

***) Antimony present as ion

Wave Soldering acc. CECC00802

Material Analyses Reports available on request